

# The Influence of Diversification to the Operation Performance of Financial Holding Companies in Taiwan

張雅涵、林筱鳳

E-mail: 381999@mail.dyu.edu.tw

## ABSTRACT

In this paper, 14 financial holding companies subsisting in Taiwan from 2009 to 2011 are selected as samples. The Herfindahl index is used to measure the total level of diversification of these companies. Followed are CCR and BCC models of the input-oriented data envelopment analysis (DEA) to measure the operating efficiency of these companies. Finally, Tobit regression analysis is also used to estimate operating performance. The empirical results are as follows: 1. We find, in 14 financial holding companies in Taiwan, only Jih-Sun's total level of diversification is increasing year by year, but the growth rate is small; The level of diversification of Hua-Nan, SinoPac and first finical holding company is year by year reduced; As a whole, the level of diversification is shown a downward trend. 2. We find that the total level of diversification and the operating performance of financial holding companies in Taiwan are negatively correlated. The higher the level of diversification means the worse its operating performance will be. 3. Asset size and commercial bank owning or not will be significantly positively correlate with the operating performance of a financial holding company. It means that the larger asset size and the owning of commercial bank of a financial holding company, the better the operating performance will be. 4. In these 14 financial holding companies in Taiwan, Fu-Bon, E-Sun, Shin-Kong and Cathay finical holding companies do the best in technical efficiency. China-Development finical holding company does the worse.

Keywords : financial holding companies(FHCs)、 Diversification、 Herfindahl Index、 Date envelopment Analysis、 Tobit Model

## Table of Contents

目錄 第一章 緒論 第一節 研究背景與動機 1 第二節 研究目的 2 第三節 研究架構 3 第二章 文獻探討 第一節 多角化之分類與其動機 5 第二節 多角化之衡量方法 11 第三節 多角化與經營績效關係之文獻回顧 15 第四節 以資料包絡分析法評估金融業經營績效之文獻回顧 25 第三章 研究方法 第一節 理論與假說 35 第二節 研究方法 36 第三節 樣本選取與資料整理 40 第四章 實證分析 第一節 金控公司多角化之衡量結果與敘述性統計量 46 第二節 金控公司之經營績效分析與差額變數分析 48 第三節 敏感度分析 58 第四節 Tobit 迴歸分析結果 59 第五章 結論與建議 第一節 結論與建議 62 參考文獻 64 附錄 72

## REFERENCES

- 一、中文部分 王克陸、彭雅惠、陳美燁(2007), 台灣金控子銀行經營績效之評估 - 使用DEA方法 , 科技管理學刊 , 12卷2期 , 2007/06/01 , p1-27。江淑玲、張佳萱(2008), 併入金控公司對銀行業經營效率影響之分析 , 創新與管理學報 , 6卷1期 , 2008/11/01 , p89 -117。江婕寧(2003), 美國金融控股公司與非金融控股公司經營績效之比較 DEA之應用 , 國立臺灣大學國家發展研究所碩士論文。朱明玉(2005), 考慮多角化之金融控股公司績效與信用評等相關性之探討 , 東吳大學經濟學系研究所碩士論文。朱炫璉、吳志銘(2009), 台灣金融控股組織對銀行效率之影響 , 台灣管理學刊 , 第9卷第1期 , P97-114。李忠翰(2011), 多角化與收入結構對銀行經營效率的影響 , 國立臺北大學經濟學系碩士論文。吳淑真(2008), 銀行多角化對財務績效的影響 - 以台灣地區銀行業為例 , 國立台北大學企業管理學系研究所碩士論文。吳佩芬(2007), 台灣金控產業之經營效率評估 , 臺灣大學會計學研究所碩士論文。邱美菁；許永明；陳寧馨(2011), 台灣銀行業多角化經營對績效的影響 , 商略學報 , 3卷3期(2011/09/22) p155 -p173。林琮傑(2006), 多角化因素與金控因素於銀行之績效評估 , 國立屏東科技大學企業管理學系研究所碩士論文。林雅惠、嚴奇峰、楊耀鴻(2012), 臺灣金控產業經營效率之研究 - 資料包絡分析法 , 萬能商學學報 , 17期 , 2012/07 , p137-158。林盟堡(2010), 臺灣金控公司事業多角化與經營績效關係之探討 , 國立臺北大學經濟學系碩士論文。施朝斌(2007), 金融控股公司多角化經營效率之評估-SBM Super DEA Mode , 東吳大學經濟學系研究所碩士論文。許鈺珮、張錫介(2005), 金融控股公司法實施對台灣銀行業經營效率影響之分析 , 金融風險管理學報 , 第一卷 , 第二期 , p33-56。莊松暉(2004), 投資銀行業關鍵成功因素分析 , 臺灣大學國際企業學研究所碩士論文。陳妙玲(2010), 金融控股公司購併後業務多角化對財務績效之影響:以成本與市場相關表現?中介變數 , 臺大管理論叢 , 20卷2期 , 2010/06/01 , p251-272。陳佳梅、鍾俊文(2005), 加入金控對金融機構信用評等及市場佔有率之影響 , 貨幣觀測與信用評等期刊 , 第53卷 , p18-30。陳麒安(2005), 以內部資本市場與公司治理角度探討金融控股公司成立前後績效之研究 , 輔仁大學管理學研究所碩士論文。曹常鴻、謝宇婷(2009), 金融控股公司經營效率之研究 , 立德學報 , 6卷2期 , p32-42。張麗娟、鍾雅雯(2010), 探討國內商業銀行國際化程度與多角化策略對經營績效的影響 , 中華管理評論國際學報 , 第十三卷第三期 , p1-12。彭科穎(2007), 台灣地區金融控股公司經營效率分析 , 國立台北大學合作經濟學系碩士論文。彭雅惠、吳東姿(2006), 台灣金融控股公司所屬銀行之特質及銀行績效探討 , 績效與策略研究期刊 , 第三卷第一期 , p19-32

。楊維娟、陳俐臻、林福來(2008) , 台灣銀行在金控與非金控架構下經營效率之比較—資料包絡分析法之應用。國立臺中技術學院學報 , 第12期p33-48。趙莊敏、林培英(2008) , 共同行銷效益與公司治理變數對金融控股公司經營績效之影響 二系統DEA與超級效率DEA模型之應用 , 台北科技大學學報 , 41卷1期 , 2008/06/01 , p69-88。歐陽豪、蔣聲雄(2012) , 多角化策略與年報資訊揭露對金融產業公司績效影響 - 金融控股公司組織型態調節效果之實證研究 , 台灣金融財務季刊 , 13卷3期 , 2012/09/01 , p1-42。劉松瑜、謝燧琪、溫育芳(2006) , 台灣銀行業在金控與非金控架構下之效率分析 , 台灣金融財務季刊 , 7卷3期 , 2006/09/01 , p127-176。劉秀玲、鄭鴻章(2010) , 金控公司架構與非利息收入業務對台灣銀行業經營效益與風險之影響 , 台灣金融財務季刊 , 11卷3期 , 2010/09/01 , p1-31。鄭銘、蔡錫銘(2010) , 臺灣地區金融控股公司經營效率研究 基於產業組織理論 , 華東經濟管理學報 , 24卷11期 , p78-82。二、外文部分 Aaker, D.A.(1995), Strategic Market Management, N.Y.: John Wiley & Sons, Inc.. Aly, H. Y., R. Grabowski, C. Pasurka, and N. Rangan, (1990), " Technical, Scale, and Allocative Efficiencies in U.S. Banking: An Empirical Investigation, " The Review of Economics and Statistics 72(2), 212-218. Ansoff,H.I.(1965), Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion, New York. Arunava Bhattacharyya, C.A.K. Lovell and Pankaj Sahay, (1997), " The Impact of Liberalization on the Productive Efficiency of Indian Commercial Banks " , European Journal of Operational Research , Vol.98, pp.332-345. Bunker, R. D., A. Charnes, and W. W. Cooper,(1984) , " Some Models for Estimating Technical and Scale Inefficiencies in Data Envelopment Analysis, " Management Science, 30, 9, pp.1078-1092. Berry, C. H. (1971), Corporate Growth and Diversification, Journal of Law and Economics, Vol.14, No.2, pp.371-383. Booz, E., Allen, J., and Hamilton, C.,(1985) " Diversification a Survey of European Chief Executives " , Booz, Allen and Hamilton, Inc.. Calmes, C. and Liu, Y.(2009) , Financial Structure Change and Banking Income: A Canada-U.S. Comparison, Journal of International Financial Markets, Institutions and Money, 19(1), p128-139. Charnes, A., W. W. Cooper, and E. Rhodes, (1978), " Measuring the Efficiency of Decision Making Units, " European Journal of Operational Research, 2,6,pp.429-444. Chen, Y. C., L. Sun, and C. W. Peng ,(2005) " Commercial Banks ' Performance in Taiwan, " International Journal of Business Performance Management, p444-463 Chen, T. and T. Yeh (2000), " A Measurement of Bank Efficiency, Ownership and Productivity Changes in Taiwan " , The Service Industries Journal, Vol.20 (1), pp.95-109. Chiorazzo, V., Milani, C. and Salvini, F.,(2008). Income Diversification and Bank Performance: Evidence from Italian Banks, Journal of Financial Services Research, 33(3), 181-203. Cubo-Ottone Alberto, and Maurizio Murgia(2000), Mergers and Shareholders Wealth in European Banking, Journal of Banking and Finance, vol. 24, issue 6, pp.831-859. Das, A. and S. Ghosh (2009), Financial Deregulation and Profit Efficiency: A Nonparametric Analysis of Indian Banks, Journal of Economics and Business, Vol.61, No.6, pp.509-528. Favero, C. A. and L. Papi (1995), Technical Efficiency and Scale Efficiency in the Italian Banking Sector: A Non-parametric Approach, Applied Economics, Vol.27, No.4, pp.385-395. Farrell, M. J., (1957), The Measurement of Productive Efficiency, Journal of the Royal Statistical Society, 120, 3, pp.253-281. Hahn, F. R. (2007), Domestic Mergers in the Austrian Banking Sector: a Performance Analysis, Applied Financial Economics, Vol.17, No.3,pp.185-196. Hoskisson, R. E. and M. A. Hitt (1990), Antecedents and Performance Outcomes of Diversification: A Review and Critique of Theoretical Perspectives, Journal of Management, Vol.16, No.2, pp.461-509. Kohers. T., M. H. Hung &N.Kohers(2000), Market perception of efficiency in bank holding company merger: the roles of DEA and SFA models in capturing merger potential. Review of Financial Economics,9,101-120. Laeven , L. and Levine , R. ,(2007), Is There a Diversification Discount in Financial Conglomerates? Journal of Financial Economics, 85(2), 331-367. Lepetit, L., Nys, E., Rous, P. and Tarazi, A.,(2008), Bank Income Structure and Risk: An Empirical Analysis of European Banks, Journal of Banking & Finance, 32(8), 1452-1467. Mercieca, S., Schaeck, K. and Wolfe, S.,(2007), Small European Banks: Benefits from Diversification? Journal of Banking & Finance, 31(7), 1975-1998. Miller, S. M. and A. G. Nouias (1996), " The Technical Efficiency of Large Bank Production. " Journal of Banking and Finance, 20(3), 495-509. Obi, C. P. and A. Emenogu,(2003), " Bank Holding Company Expansion into Nonbank Functions: Is the Rise in Systematic Risk Rewarded? " Managerial Finance, pp.9-22. Ramanujam and Varadarajan (1989), Research on Corporate Diversification: a Synthesis, Strategic Management Journal, Vol.10. p.531. Rumelt, R. P. (1974), Strategy, Structure and Economic Performance, Harvard University Press, Cambridge, MA. Rumelt, R. P. (1982), Diversification Strategy and Profitability, Strategic Management Journal, Vol.3, No.4, pp.359-369. Saha, A. and T. Ravisankar, (2000), " Rating of India Commercial Banks: A Dea Approach " , European Journal of Operational Research, Vol.124, pp.613-630. Sathye, M. (2001), " X-Efficiency in Australian Banking: An Empirical Investigation " , Journal of Banking and Finance,Vol.25, pp.467-482. Stiroh, K. J. and Rumble, A., (2006), The Dark Side of Diversification: The Case of US Financial Holding Companies, Journal of Banking & Finance, 30(8), 2131-2161. Varadarajan, P. R. and V. Ramanujam (1987), Diversification and Performance: A Reexamination Using a New Two-Dimensional Conceptualization of Diversity in Firms, Academy of Management Journal, Vol.30, No.2, pp.380-393. Wall, L. D., Reichert, A. K., and Mohanty, S. (1993), Deregulation and the opportunities for commercial bank diversification, Economic Review, 78(5), pp. 1-25. Wood. A.(1971), Diversification , Merger , Research Expenditure: A Review of Empirical Studies , In Marris , R. and A. Wood(eds),The Corporate Economy : Group Competition and Innovation Potential, New York: Macmillan. Wrigley L. (1970), Divisional Autonomy and Diversification, Doctoral Dissertation, Harvard Business School, Boston, MA. Yamori, N., K. O. Harimaya and K. Kondo,(2003), " Are Banks Affiliated with Bank Holding Companies More Efficient Than Independent Banks? The Recent Experience Regarding Japanese Regional BHCs, " Asia-Pacific Financial Markets, pp.359-376.